

## The Claims:

1. (previously amended) A method for retrieving and accessing data stored in a plurality of systems arranged for operating part of one or more electrical power networks, the method comprising:

providing the systems with user standard interfaces having standard object-oriented navigation and selection, and input and display methods,

providing the interfaces with context sensitive navigation functions that indicate which system is active,

providing a virtual asset register comprising elements of the systems, the virtual asset register comprising a model for exchange of data between the systems, a mechanism for data consistency in data exchange between the systems, and cross-reference and mapping of relationships of the elements of the systems, wherein similar elements in different systems are consistently represented in the virtual asset register,

adding a new object and data related to the new object into a first system,

adding a copy of the new object into a plurality of relevant systems,

registering the new object in the virtual asset register,

creating the new object in each relevant system based on object templates,

establishing automatically a connection between said relevant systems and the new object,

replicating data related to the new object from the new object to other systems and relevant systems,

establishing a consistency of accessed or retrieved data in the new object and relevant

systems by checking a consistency of attributes of the accessed or retrieved data utilizing the virtual asset register by identifying at least one of the new or a given object or copies of the new or a given object and comparing attributes of all copies of the same new or given object, requesting data relating to a target object included in one of the systems, identifying relevant systems including data relating to the target object, and retrieving the data regarding the target object from identified relevant systems utilizing the standard interfaces.

2. (previously amended) The method according to claim 1, further comprising: maintaining object connections for the new object and for any other object that is at least one of accessed, retrieved or stored by a SCADA system as well as by any system from the list of: GIS system, ERP system, CMMS system, PM system, WO system, WMS system.

3. (previously amended) The method according to claim 2, further comprising: mapping at least one of the new object or copies of the new object using a model based on a CIM/XML document.

4. (previously amended) The method according to claim 2, further comprising: mapping attributes of at least one of the new object or copies of the new object using a model based on a CIM/XML document.

5. (previously amended) The method according to claim 1, further comprising: establishing the automatic connection or connections between copies of the same object

in different systems utilizing a CIM/XML layer.

6. (previously amended) The method according to claim 1, further comprising:  
mapping the new object utilizing a virtual asset register dependent on at least one of the  
CIM/XML layer or mapping.

7. (previously amended) The method according to claim 1, further comprising:  
selecting an object utilizing an identifier in any said relevant system.

8. (previously amended) The method according to claim 7, wherein the identifier may  
be a Uniform Resource Identifier compatible as an identifier with a standard for Resource  
Description Framework.

9. (previously amended) The method according to claim 4, further comprising:  
accessing one or more object attributes of the new object and changing an object attribute  
of the new object in a source system.

10. (previously amended) The method according to claim 4, further comprising:  
updating an object attribute of the new object in the source system.

11. (cancelled)

12. (previously amended) The method according to claim 1, further comprising:

deleting an object by deleting the object in all relevant systems.

13. (previously amended) The method according to claim 12, further comprising:  
deleting an object by deleting a defined object in each system.

14. (previously amended) The method according to claim 13, further comprising:  
deleting an object by deleting object connections to a deleted object or deleted defined  
object.

15. (previously amended) A computer program product for retrieving and accessing data  
stored in a plurality of systems arranged for operating part of one or more electrical power  
networks, the computer program product comprising:

a non-transitory computer readable medium; and

software code portions or computer code recorded on the computer readable medium to  
cause a computer or processor to carry out the steps of

providing the systems with user standard interfaces having standard object-oriented  
navigation and selection, and input and display methods,

providing the interfaces with context sensitive navigation functions that indicate which  
system is active,

providing a virtual asset register comprising elements of the systems, the virtual asset  
register comprising a model for exchange of data between the systems, a mechanism for data  
consistency in data exchange between the systems, and cross-reference and mapping of  
relationships of the elements of the systems, wherein similar elements in different systems are

consistently represented in the virtual asset register,

- adding a new object and data related to the new object into a first system,
- adding a copy of the new object into a plurality of relevant systems,
- registering the new object in the virtual asset register,
- creating the new object in each relevant system based on object templates,
- establishing automatically a connection between said relevant systems and the new object,
- replicating data related to the new object from the new object to other systems and relevant systems,
- establishing a consistency of accessed or retrieved data in the new object and relevant systems by checking a consistency of attributes of the accessed or retrieved data utilizing the virtual asset register by identifying at least one of the new or a given object or copies of the new or a given object and comparing attributes of all copies of the same new or given object,
- requesting data relating to a target object included in one of the systems,
- identifying relevant systems including data relating to the target object, and
- retrieving the data regarding the target object from identified relevant systems utilizing the standard interfaces.

16. (cancelled)

17. (previously amended) A computer-based system for retrieving and accessing data, said computer-based system comprising:

- a plurality of systems storing the data, wherein the data is arranged for operating part of

one or more electrical power networks, the systems comprising user standard interfaces having standard object-oriented navigation and selection, and input and display methods, wherein the interfaces are provided with context sensitive navigation functions that indicate which system is active,

a virtual asset register comprising elements of the systems, the virtual asset register comprising a model for exchange of data between the systems, a mechanism for data consistency in data exchange between the systems, and cross-reference and mapping of relationships of the elements of the systems, wherein similar elements in different systems are consistently represented in the virtual asset register, wherein objects added to the systems are registered in the virtual asset register,

object templates upon which new objects created in each relevant system are based,

a plurality of databases,

a data communication network and which system includes an HMI providing navigation and access to at least one of at least one SCADA system or database as well as to at least one of any system or database from the list of: ERP, GIS, CMMS, WO, WMS, PM,

a consistency establisher configured to establish a consistency of accessed or retrieved data in the new object and relevant systems utilizing mapping data related to a new object to be added to the data using the virtual asset register,

one or more members for checking the consistency of attributes of any data so accessed or retrieved data by identifying at least one of the or each new or given object or copies of the new or given object in any separate system and comparing attributes of all such copies of the same new or given object from each of the separate systems

a data requester configured to request data relating to a target object included in one of

the systems,

an identifier configured to identify relevant systems including data relating to the target object, and

a data retriever configured to retrieve the data regarding the target object from identified relevant systems utilizing the standard interfaces.

18. (previously amended) The computer-based system according to claim 17, further comprising:

one or members for: adding a new object; automatically establishing a connection between said relevant systems and the new object; and for replicating data related to the new object to other systems and relevant systems.

19. (previously amended) The computer-based system according to claim 18, further comprising:

one or members for: maintaining object connections; providing connection or connections utilizing a layer with a structured text document protocol; and mapping the new object utilizing a structured text document model.

20. (previously amended) The computer-based system according to claim 19, wherein any of: the structured text document protocol layer, or the structured text document for mapping the new object are implemented with a CIM/XML model.

21. (cancelled)

22. (previously amended) The computer-based system according to claim 17, wherein said asset register comprises a list of power network assets which list comprises in turn cross reference and mapping data for objects that are at least one of represented or stored in a SCADA system as well as in any system from the list of: GIS system, ERP system, CMMS system.

23. (previously amended) The computer-based system according to claim 17, wherein said asset register comprises a list of references for all objects representing individual items of at least one of physical or logical equipment comprised in the one or more parts of the said power network.

24. (previously amended) The computer-based system according to claim 23, wherein the list comprises a master list of all objects in the one or more parts of the said power network together with the mapping data for each object according to a CIM model.

25. (previously amended) The computer-based system according to claim 24, wherein object data for the objects comprised in the master list of the asset register is stored in at least one separate system including any of a system for: SCADA, GIS, CMMS, ERP, PM, WO.

26. (previously amended) The computer-based system according to claim 24, wherein the asset register is a virtual asset register, which does not comprise any object data for the objects comprised in the master list and comprises only link information or cross reference data or mapping data.



27. (previously amended) The computer-based system according to claim 17, wherein the virtual asset register is implemented according to an XML or CIM model or document.

28. (previously amended) The computer-based system according to claim 17, further comprising:

an HMI that may comprise object data accessed or retrieved or stored in at least one of a SCADA system or database as well object data originating in at least one of any system or database from the list of: ERP, GIS, CMMS, WO, PM.

29. (previously amended) The computer-based system according to claim 17, further comprising:

a display comprising a human-machine interface for retrieving and accessing data stored in a plurality of systems arranged for operating part of one or more electrical power networks, which HMI comprises data accessed or retrieved from or stored in a SCADA system, and also comprising data accessed or retrieved from or stored in any from the list of: GIS system, ERP system, CMMS system, PM system, WO system.

30. (previously amended) The computer-based system according to claim 29, wherein the human-machine interface comprises at least one graphical user interface a data manipulator configured to manipulate the data retrieved from or stored in the SCADA and any of the systems for at least one of GIS, ERP or CMMS.

31. (previously amended) The computer-based system according to claim 29, wherein said human-machine interface reads out any object property independent of source.

32. (previously amended) The computer-based system according to claim 29, wherein the human-machine interface comprises access to simultaneous data stored in or held by any of the list of: SCADA system, GIS system, ERP system, CMMS system, PM system, WO system.